

**Topic: 5. Secondary Prevention of Cardiovascular Disease.****Analysis of Factors Associated with Smoking Relapse**

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**Introduction and Objectives**

It is reported that 3 months of professional smoking cessation treatment achieves an initial smoking cessation rate of 80 %. However, a 1 year cessation rate decreases to approximately 50 %. The most common causes of relapse are weight gain, stress, and nicotine withdrawal symptoms. Relapse prevention is important in smoking cessation treatment. The aim of the present study was to investigate the differences between those who continued smoking cessation (group A) and those who resumed (group B) at 1 year after smoking cessation.

**Materials and Methods**

We evaluated 143 outpatients who had continued smoking cessation for 3 months and revisit our outpatient clinic at 1 year after smoking cessation. We measured various parameters before smoking cessation, and at 3 months and 1 year after smoking cessation.

**Results**

There were no significant differences in nicotine dependence, daily cigarette consumption, age, body mass index (BMI) and metabolic parameters between group A (n = 135) and group B (n = 8) before smoking cessation and at 3 months after smoking cessation. However, regarding the changes in values before and after 3 months smoking cessation, the degree of change in HbA<sub>1c</sub> was significantly larger (p = 0.009) and that in BMI tended to be larger (p = 0.083) in group A than in group B.

**Conclusions**

The increase in BMI and HbA<sub>1c</sub> after 3 months smoking cessation was larger in those who successfully maintained abstinence at 1 year after smoking cessation. Therefore, focusing on continuation of smoking cessation instead of worrying weight gain may lead to better outcomes in relapse prevention in the early period after quitting smoking. The small sample size is a limitation of this study, thus further studies are required. ■

1. Central Social Insurance Medical Council.